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CONCERNING A FILING UNDER 35 U.S.C. 371**

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INTERNATIONAL APPLICATION NO.

PCT/JP98/02742

INTERNATIONAL FILING DATE

19 JUNE 1998

[EARLIEST] PRIORITY DATE CLAIMED

19 JUNE 1997

TITLE OF INVENTION

**INFORMATION RECEIVING DEVICE AND ITS METHOD, AND
INFORMATION TRANSMISSION DEVICE AND ITS METHOD**

APPLICANTS FOR DO/EO/US

Peter SHINTANI

Applicants herewith submit to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).
4. ☐ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
 - a. ☐ Is transmitted herewith (required only if not transmitted by the International Bureau).
 - b. ☒ Has been transmitted by the International Bureau.
 - c. ☐ Is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☒ A translation of the International Application into English (35 U.S.C. 371(c)(2)), including _ sheets of formal drawings and a copy of the International Search Report.
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
 - a. ☐ Are transmitted herewith (required only if not transmitted by the International Bureau).
 - b. ☐ Have been transmitted by the International Bureau.
 - c. ☐ Have not been made; however, the time limit for making such amendments has NOT expired.
 - d. ☒ Have not been made and will not be made.
8. ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☐ An oath or declaration of the inventors (35 U.S.C. 371(c)(4)).
10. ☐ The annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11. to 16. below concern other document(s) or information included:

11. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☐ A FIRST preliminary amendment.
☐ A SECOND or SUBSEQUENT preliminary amendment.
14. ☐ A substitute specification.
15. ☐ A change of power of attorney and/or address letter.

16. ☒ Other items or information:

PCT/RO/101, PCT/IB/301,308

PCT/ISA/210, 220

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17. ☒ The following fees are submitted:

(CALCULATIONS /PTO USE ONLY)

Basic National Fee (37 CFR 1.492(a)(1)-(5):

Search Report has been prepared by the EPO or JPO.....\$840.00/\$840.00

International preliminary examination fee paid to USPTO (37 CFR 1.482) (.....\$700.00

No international preliminary examination fee paid to USPTO (37 CFR 1.482) but international search fee paid to USPTO (37 CFR 1.445(a)(2))...\$770.00

Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO.....\$1040.00

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ENTER APPROPRIATE BASIC FEE AMOUNT = (\$840.00 /

Surcharge of \$130.00 for furnishing the oath or declaration later than ☐ 20 ☐ 30 (\$000.00 / months from the earliest claimed priority date (37 CFR 1.492(e)).11 Claims /Number Filed / Number Extra /Rate (Total Claims / 11 - 20 = / 0 /X \$18.00 (\$ 0.00 /Independent Claims / 4 - 3 = / 1 /X \$78.00 (\$ 78.00 /

Multiple dependent claim(s) (if applicable) /+ \$260.00 (\$ /

TOTAL OF ABOVE CALCULATIONS = (\$918.00 /

Reduction by 1/2 for filing by small entity, if applicable. Verified Small Entity statement must also be filed. (Note 37 CFR 1.9, 1.27, 1.28). (/ /

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Fee for recording the enclosed assignments (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property + (\$ 0.00 /

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NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

WILLIAM S. FROMMER
FROMMER LAWRENCE & HAUG LLP745 FIFTH AVENUE
NEW YORK, NEW YORK 10151Dated: FEBRUARY 17, 1999

SIGNATURE

WILLIAM S. FROMMER

NAME

25.506
REGISTRATION NUMBER

09/242485

360 Rec'd PCT/PTG 17 FEB 1999

PATENT
450108-4474IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Peter SHINTANI
Corresponding Int'l. App. : PCT/JP98/02742
International Filing Date : 19 June 1998
Priority Dates Claimed : 19 June 1997
For : INFORMATION RECEIVING
DEVICE AND ITS METHOD,
AND INFORMATION
TRANSMISSION DEVICE AND
ITS METHOD

745 Fifth Avenue
New York, NY 10151
February 17, 1999EXPRESS MAIL

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Abigail Murray
(Typed name of person mailing paper or fee)*Abigail Murray*
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Box PCT
Hon. Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Preliminary to the examination of this U.S.
national phase application, please enter the following
amendments:

IN THE CLAIMS:

Claim 4, lines 1-2, delete "or Claim 2".

Claim 5, lines 1-2, delete "or Claim 2".

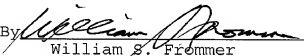
REMARKS

This application includes multiple claim dependencies. The amendment removes the multiple claim dependencies, and the filing fee for this application was computed on the basis that no dependent claim depends from more than one preceding claim.

Entry of this amendment and an early examination on the merits are respectfully solicited.

Respectfully submitted,

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WSF/jmm

2004 DEC 6 PM 4:17 17 FEB 1999

DESCRIPTION

Title of Invention

INFORMATION RECEIVING DEVICE AND ITS METHOD, AND
INFORMATION TRANSMISSION DEVICE AND ITS METHOD

Field of the Art

The present invention relates to an information receiving device and its method, and an information transmission device and its method, and particularly relates to an information receiving device and its method, and an information transmission device and its method which operate points corresponding to a response from a viewer to a request for response from a response program to make the viewer surely view the program using this points.

Background Art

In recently years, a television broadcasting has been digitized and programs of extremely many channels are provided for viewers. Thus the viewers can select and view a desired program from these many programs.

On the other hand, a program's provider (broadcasting station) provides the viewers a commercial program to advertise predetermined merchandise and receiving a consideration for it from the sponsor of that merchandise (manufacturer or seller). Thus the viewers can view the program free. And the sponsor can

advertise that providing merchandise to the viewers by that commercial program.

Generally, however, since many viewers unfortunately go or switch over the channel as well as the broadcasting of a commercial program is started, a problem that the provider of a commercial program cannot surely advertise the merchandise to the viewers is caused.

Disclosure of Invention

Considering the above points, the present invention makes viewers surely view commercial programs.

An information receiving device according to Claim 1 comprises a receiving means for receiving a program to be transmitted, an operation means for operating points corresponding to a viewer's response to the response request of a response program which requests a viewer's response, and a recording means for recording specifying information to specify a response program, and the points operated by the operation means at least, when the program received by the receiving means is a response program.

A method for receiving information according to Claim 6 comprises a receiving step for receiving a program to be transmitted, an operation step for operating points corresponding to a viewer's response to the response request of a response program which requests a viewer's response, and a recording step for recording specifying information to specify a response program,

and the points operated by the operation step at least, when the program received by the receiving step is the response program.

An information transmission device according to Claim 8 includes a transmission means for transmitting a program, and transmits a response program which requests a viewer's response and specifying information to specify that response program together by the transmission means.

A method for transmitting information according to Claim 10 includes a transmission step for transmitting a program is provided, and transmits a response program which requests a viewer's response and specifying information to specify that response program together by the transmission step.

In the information transmission device according to Claim 8 and the method for transmitting information according to Claim 10, a response program and specifying information to specify the response program are transmitted. And in the information receiving device according to Claim 1 and the method for receiving information according to Claim 6, points are operated corresponding to a viewer's response to the response request of the response program, and the points are recorded together with the specifying information.

Brief description of Drawings

Fig. 1 is a block diagram showing an example of the configuration of a digital television signal receiving device to

which the present invention is applied.

Fig. 2 is a flow chart explaining the operation of the embodiment of Fig. 1.

Fig. 3 is a diagram showing a display example on a display 7A of Fig. 1.

Fig. 4 is a diagram showing a display example on the display 7A of Fig. 1.

Fig. 5 is a flow chart explaining an accounting in the embodiment of Fig. 1.

Fig. 6 is a flow chart explaining the processing of responded data in the embodiment of Fig. 1.

Fig. 7 is a flow chart explaining a processing for selecting merchandise in the embodiment of Fig. 1.

Fig. 8 is a diagram showing a display example in step S52 in Fig. 7.

Best Mode for carrying Out the Invention

The present invention will be described in detail with reference to the accompanying drawings.

Fig. 1 shows an example of the configuration of a digital television broadcasting receiving device to which the present invention is applied. A tuner 2 receives digital television broadcasting of a specified channel via an antenna 1 and outputs the demodulated signal. An FEC circuit 3 performs error correction of the signal supplied from the tuner 2 and outputs a resultant signal

to a transport circuit 4. The transport circuit 4 separates video data V, left and right audio data A_L and A_R , and control data from the signal inputted from the FEC circuit 3 and outputs the video and audio data to an MPEG decoder 5 as well as outputting the control data which includes data on conditional access relating to the contents of broadcasting receiving contract with viewers to a conditional access interface 9.

The MPEG decoder 5 decodes the inputted video data and audio data and outputting the decoded data to a display processor 6. The display processor 6 processes the inputted video data and audio data to convert into an analog video signal and an audio signal, and outputting them to a display 7A and speakers 7B respectively.

A smart card 10 can be attached to the conditional access interface 9. A microprocessor and a memory are built in this smart card 10 to store ciphered information on the contents of contract with viewers, ciphered information on accounting of pay programs, etc.

The microprocessor 8 controls each part to execute receiving processing. A modem 11 can transmit/receive various data and commands or the like via a telephone line.

An IR receiving part 12 receives an IR signal to be transmitted from the IR transmission part 33 of a remote controller 31 that has various keys in addition to a ten key 32, and outputs the detected signal to the microprocessor 8. The viewer can input various commands to the microprocessor 8 by operating the various keys of the remote controller 31.

The operation of this device will be described hereinafter, referring to a flow chart of Fig. 2. When viewing a program, the viewer specifies a receiving channel by operating the ten key 32, for example. An IR signal corresponding to this specified channel is generated from the IR transmission part 33 of the remote controller 31. If receiving this signal via the IR receiving part 12, the microprocessor 8 instructs the tuner 2 to receive the specified channel. The tuner 2 receives the radio wave of the specified channel and outputting the demodulated signal. The FEC circuit 3 performs error correction to the signal of the inputted channel, and then outputs the resultant data to the transport circuit 4.

The transport circuit 4 separates control data from the inputted data, and outputs this to the smart card 10 via the conditional access interface 9. The smart card 10 refers conditional access data in the control data inputted from the transport circuit 4 to the contract condition of the viewers previously stored to determine whether or not it is a program permitted to view. As a result, if it is the program permitted to view, the transport circuit 4 is controlled via the conditional access interface 9, while if the data inputted from the FEC circuit 3 is the data ciphered or interleaved, it is decoded or deinterleaved.

The MPEG decoder 5 decodes video data and audio data supplied from the transport circuit 4 and outputting the decoded data to the display processor 6. The display processor 6 processes the inputted video data and audio data to convert into an analog video signal and

an audio signal, and outputting them to the display 7A and the speaker 7B respectively.

When such receiving processing is performed, the conditional access interface 9 executes a processing shown in the flow chart of Fig. 2. In step S1, first, it is determined whether or not the tuner 2 is now receiving a commercial program. Note that, in this specification, also a commercial program for advertising a predetermined merchandise, service, etc., (hereinafter, it is simply referred to as merchandise) to the viewers is regarded as one of programs other than programs such as a drama, news, a movie, etc.

If the program now received is a commercial program, it goes to step S2 and the conditional access interface 9 determines whether or not the commercial program is a program which requests the viewer to respond. It can be determined on a receiving side, by transmitting a flag showing whether or not to be a response request program from the program transmission side, from this flag. If the program now received is a response request program, the conditional access interface 9 makes the memory built in the smart card 10 store the ID of the commercial program now received.

In the response request program, a picture to advertise a merchandise is displayed, and then, as shown in Fig. 3, a message like "Push the number 5 if you like this merchandise." is displayed. If responding to this message, the viewer operates the number 5 key in the ten key 32 of the remote controller 31. A signal corresponding to this number 5 key is outputted from the IR

transmission part 33 in the remote controller 31 as an IR signal. This signal is received by the IR receiving part 12, and the detected signal is supplied to the microprocessor 8. If this detected signal is inputted to, the microprocessor 8 outputs a signal showing that the number 5 key was operated to the conditional access interface 9.

In step S4, the conditional access interface 9 monitors the signal from the microprocessor 8 to determine whether or not the viewer responded to the response request of the commercial program. If his response is determined, the conditional access interface 9 goes to step S5 to add a prescribed value to points stored in the smart card 10, while if the viewer does not respond to the response request of the commercial program, the points adding processing in step S5 is skipped. Note that, if the viewer does not respond to the response request, the points may be actively subtracted in addition to adding no points, as occasion demands.

Then, the conditional access interface 9 goes to step S6 to record the contents of the viewer's response in the smart card 10 along with the ID of the commercial program or the like. In step S7, whether or not the response request has completed in the commercial program is determined. If it has not completed yet, the conditional access interface 9 returns to step S4 to repeatedly execute the processing after S4. If the completion of the response request is determined, it returns to step S1 to repeatedly execute the processing after S1.

In addition, it may make the viewer answer a questionnaire,

for example, by requesting to input the viewer's age who operated the response to the merchandise, or by making him selectively input his favorite color, or the like. And thus response results can be recorded in the smart card 10.

In step S1, if it is determined that the program now received is not a commercial program, the conditional access interface 9 goes to step S8 to determine whether or not the program now received is a pay program. If the program now received is not a pay program, it returns to step S1. Accordingly, when a free normal program is broadcasted, the processings of step S1 and step S8 are repeatedly executed.

In step S8, if it is determined that a pay program is being received now, the conditional access interface 9 goes to step S9 to read out the points now stored in the smart card 10 and displaying it on the display 7A together with a message like "Will you use this points for a payment for pay broadcasting?", as shown in Fig 4, for example. The viewer determines whether or not to use the present points for the payment for pay broadcasting. If using it, the viewer operates a number 1 key corresponding to YES in the ten key 32 of the remote controller 31 in step S11. While if not using it, the viewer operates a number 3 key corresponding to NO in step S14.

If an input showing that the points are to be used for the payment for pay broadcasting is obtained, in step S12, a processing to cancel points corresponding to the toll of pay broadcasting from the present points is executed. That is, the conditional access

interface 9 subtracts points corresponding to the toll of a pay broadcasting now to be received from the present points stored in the smart card 10. For example, if the present points are 250 points and a toll of the program corresponds to 50 points, new points becomes 200 points, and if a toll of the program corresponds to 300 points, new points becomes -50 points.

Then, in step S13, whether or not the points after the update are 0 or more is determined. If it is 0 or more, the conditional access interface returns to step S1 without conducting an accounting in step S15.

While if the points after the update are smaller than 0 (if it is minus) or subsequently to the processing of step S14, the conditional access interface 9 goes to step S15 to execute the accounting to the toll of the pay program. At this time, if an input showing that the points are not to be used for the payment for the pay broadcasting is obtained in step S14, the conditional access interface 9 executes a normal accounting. That is, the toll of the pay broadcasting program now viewed is added to a toll of reception until then, stored in the smart card 10. On the contrary, if the points after the update are minus resulted from the cancellation of the pay broadcasting toll by the points, a part of the toll corresponding to that minus points is added.

As the above manner, points are added when the viewer responds to the response request of a commercial program. Thereby, the viewer can view a pay program at a reduced toll by the added points.

Such service cannot be received only if the user responds to a response request in a commercial program. For example, this service cannot be received only if the viewer simply watches the commercial program or records it to a video tape. Moreover, since the time of the response request is uncertain in the commercial program, the viewer cannot receive this service only if he views the commercial program from the beginning to the end. As a result, the program's provider can make the user surely view the commercial program.

The accounting of pay program will be described hereinafter with reference to a flow chart of Fig. 5. In step S31 the program's provider commands to read out account data stored in the smart card 10 of a specified viewer. This command can be performed by broadcasting an ID to specify the viewer or transmitting via a telephone line, for example. If a readout of the account data is commanded via radio waves, the readout command is supplied to the conditional access interface 9 via the transport circuit 4. While if this read command is outputted via a telephone line, this command is inputted to the microprocessor 8 from the modem 11. The microprocessor 8 outputs this command to the conditional access interface 9.

If the readout of account data is commanded in this manner, the conditional access interface 9 reads the account data until then, stored in the smart card 10, and outputs this to the microprocessor 8. If receiving the input of the account data, the microprocessor 8 controls the modem 11 to transmit this to the commander of readout

via the telephone line. On the program's provider side, this account data is received in step S32. Then, the accounting corresponding to the received account data is executed in step S33. For example, a debit note corresponding to the account data is issued to that viewer or the settlement of the account is performed by a credit card.

Furthermore, the program's provider can collect responded data recorded in the smart card 10 by a processing shown by a flow chart of Fig. 6. In step S41, a responded data read command is first outputted to the specified viewer. This read command can be outputted via the radio wave or the telephone line similarly to the account data read command in step S31 of Fig. 5. On the receiving side, responding to this, the conditional access interface 9 reads the responded data stored in the smart card 10 (data recorded in step S6 of Fig. 2) along with the commercial ID, and outputting them to the microprocessor 8. The microprocessor 8 controls the modem 11 to transmit these responded data and commercial ID to the provider of the commercial program via the telephone line. On the commercial program's provider side, this responded data is received by step S42. Then, the responded data received in step S42 is processed in step S43.

As described above, the result of a questionnaire performed via the commercial program is included in this responded data. Thus, in addition to the number of households which viewed that commercial program, the commercial program's provider can obtain detailed data such as a date of viewers who has an interest in the merchandise, a

distinction of male/female, etc., by analyzing the answer to this questionnaire. Moreover, also the latest liking and tendency or the like of viewers can be analyzed depending on the contents of a questionnaire. Such information can also be used in the development of new goods, and the information itself can also be offered to others, if necessary.

Note that, such data collection may be performed simultaneously with accounting.

The commercial program's provider can not only make a viewer surely view the commercial program but also collect and analyze the responded data.

In said example of processing, points are added to the toll of a pay program, however, a merchandise may be presented to a viewer instead of that, for example. Fig. 7 shows an example of processing in this case.

In step S51, the viewer first operates a predetermined key of the remote controller 31 to command the readout of the present points stored in the smart card 10. When this points read command is inputted via the microprocessor 8, in step S52 the conditional access interface 9 reads out and displays the points stored in the smart card 10 on the display 7A, for example, as shown in Fig. 8. At this time, the points and merchandise which can be presented by that points are displayed. In a display example of Fig. 8, it is displayed that the points are 125 points and the merchandise selectable by this points is a camera, video tape recorder or CD

player.

The viewer looks at this display and selects a desirous merchandise in step S53. For example, if the camera is desired in the display example of Fig. 8, a number 1 key is operated in the ten key 32 of the remote controller 31. If the video tape recorder is desired, a number 2 key is operated. And if the CD player is desired, a number 3 key is operated.

If a signal to select a merchandise is inputted via the microprocessor 8, the conditional access interface 9 executes a processing for transmitting data showing that the selected merchandise is desired by the viewer, in step S54. That is, at this time, the conditional access interface 9 controls the microprocessor 8 to transmit this data to the commercial program's provider from the modem 11 via the telephone line. If receiving this data transmission, the commercial program's provider performs a processing for delivering the merchandise to the viewer. Note that, after merchandise is selected, the remaining points are reduced by the points corresponding to that merchandise.

Otherwise, the points stored in the smart card 10 may be converted into a coupon at a variety shop and helping the viewer to buy a desired merchandise selling on the shop, for example. Specifically, the user takes the smart card to the shop with him, and reads out all the points by points reader installed in the shop and making zero points remain. Then, the user can receive a coupon corresponding to the points.

In the above embodiment, data is transmitted/received to/from the program's provider side via a telephone line by means of the modem 11. In a cable television system having bi-directional channels or the like, however, the data can be transmitted to a program's provider side by means of up-directional channels.

Besides, in the above embodiment, the points are recorded in the smart card 10. In the case where there are up-directional channels, however, the points may be recorded on a broadcasting station side.

As the smart card 10, PCMCIA (personal computer memory card international association) cards or other cards can be used.

In the above embodiment, a response is requested to the viewer in a commercial program. However, this program is not only limited to the commercial program but also various programs can be used instead.

Furthermore, in the case where a printer is connected to or built in a digital television broadcasting receiving device, a coupon may be outputted from the printer. In this case, since a memory for storing points is not needed to be a memory in a smart card, points may be stored in a memory in the receiving device.

Moreover, in the above embodiment, a commercial ID and responded data are transmitted to a program's provider. However, by transmitting also a commercial ID which received no response, the program's provider can recognize viewers' liking further detailed and can use in the development of goods.

In the above, the case where the present invention is applied to a digital television signal receiving device has been described as an example however, the present invention can also be applied to other information receiving devices.

As described above, according to the present invention, since points are operated corresponding to a viewer's response to a response request by a response program and recording the points, it can make the viewer surely view the program. At the same time, also the viewer side can receive a program at further lower toll by using this points.

Industrial Capability

In a digital television broadcasting, a commercial program in the form of questionnaire with a benefit is broadcasted. Thereby, the propaganda effect of the commercial program is improved, and liking data for merchandise of viewers can be surveyed.

CLAIMS

1. An information receiving device, comprising:

a receiving means for receiving a program to be transmitted;

an operation means for operating points corresponding to a viewer's response to the response request of a response program which requests a viewer's response; and

a recording means for recording specifying information to specify a response program, and the points operated by said operation means at least, when the program received by said receiving means is said response program.

2. The information receiving device according to Claim 1, further including;

a response program determination means for determining whether or not the program received by said receiving means is said response program.

3. The information receiving device according to Claim 1 or Claim 2, wherein;

said recording means also records the contents of the viewer's response.

4. The information receiving device according to Claim 1 or

Claim 2, further including;

a transmission means for transmitting the recorded contents in said recording means.

5. The information receiving device according to Claim 1 or Claim 2, further including:

a pay program determination means for determining whether or not said program is a pay program; and

a processing means for performing accounting to the points stored in said recording means, when said program is a pay program.

6. A method for receiving information, comprising:

a receiving step for receiving a program to be transmitted;
an operation step for operating points corresponding to a viewer's response to the response request of a response program which requests a viewer's response; and

a recording step for recording specifying information to specify a response program, and the points operated by said operation step at least, when said program received by the receiving step is said response program.

7. The method for receiving information according to Claim 6, further including;

a response program determination step for determining whether or not the program received by said receiving step is said

response program.

8. An information transmission device, wherein:

a transmission means for transmitting a program is provided; and

a response program which requests a viewer's response and specifying information to specify that response program are transmitted together by said transmission means.

9. The information transmission device according to Claim 8, further including;

a receiving means for receiving responded data from the viewer to the response request of said response program transmitted from an information receiving device.

10. A method for transmitting information, wherein:

a transmission step for transmitting a program is provided; and

a response program which requests a viewer's response and specifying information to specify that response program are transmitted together by said transmission step.

11. The method for transmitting information according to Claim 10, further including;

a receiving step for receiving responded data from the

viewer to the response request of said response program
transmitted from an information receiving device.

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ABSTRACT

The present invention makes viewers surely view commercial programs.

When a commercial program is broadcasted and displayed on a display (7A), a viewer is requested a response. The viewer operates a prescribed key in the ten key (32) of a remote controller (31) for response. If the viewer responds to the response request of the commercial program, points are added to a smart card (10). The viewer can view a pay program using the points recorded in the smart card (10).

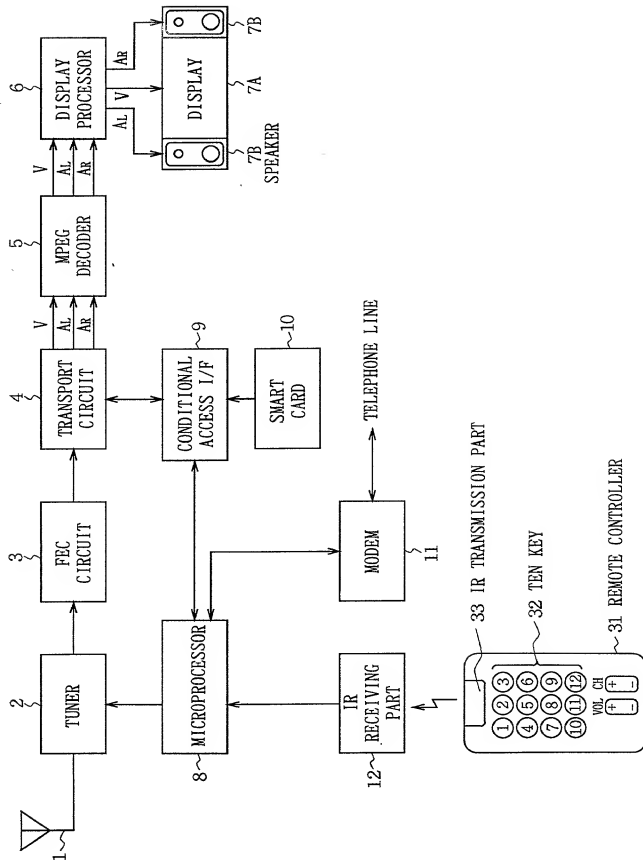


FIG. 1

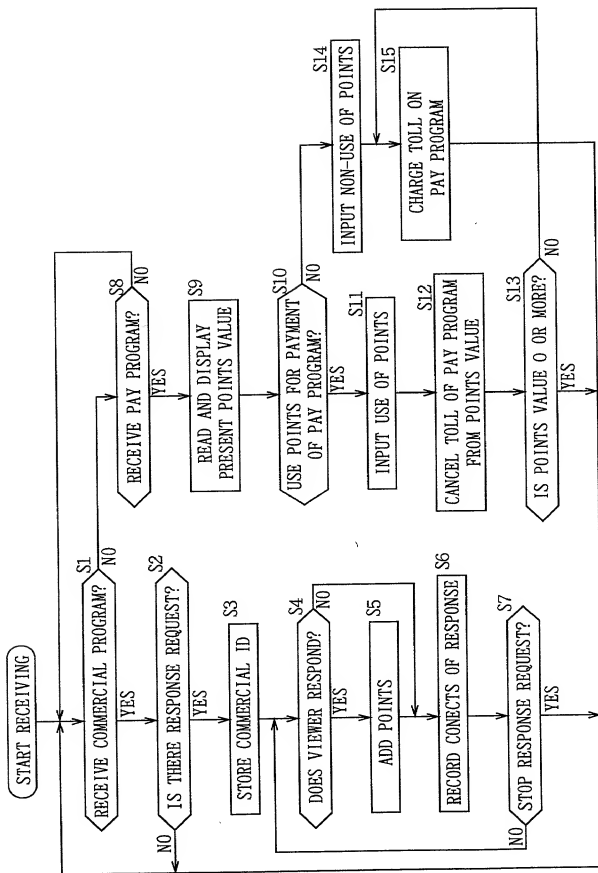


FIG. 2

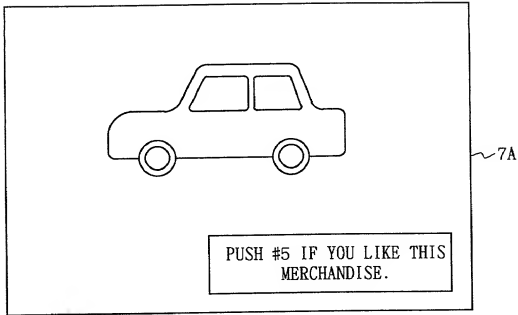


FIG. 3

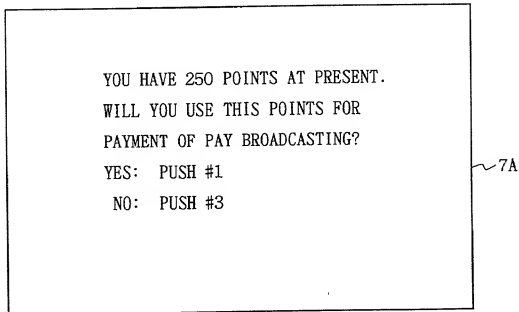


FIG. 4

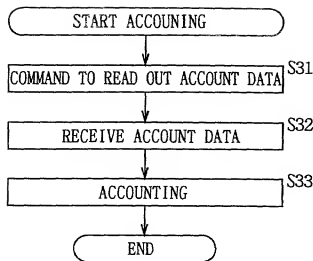


FIG. 5

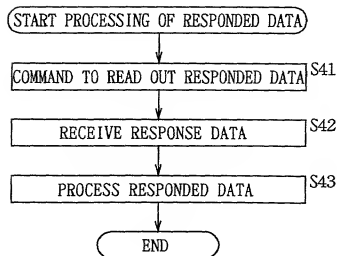


FIG. 6

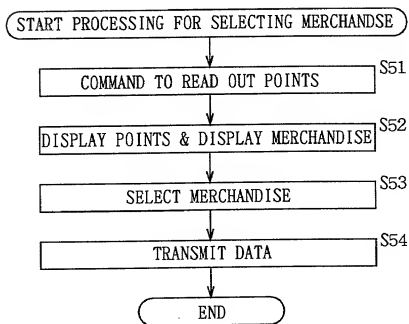


FIG. 7

YOU HAVE 125 POINTS AT PRESENT
YOU CAN SELECT FOLLOWING
MERCHANDISE WITH THIS POINTS:

- 1 CAMERA
- 2 VIDEO TAPE RECORDER
- 3 CD PLAYER

7A

FIG. 8

Description of Reference Numerals

2...TUNER, 4...TRANSPORT CIRCUIT, 7A...DISPLAY,
8...MICROPROCESSOR, 9...CONDITIONAL ACCESS I/F, 10...SMART CARD,
11...MODEM, 12...IR RECEIVING PART, 31...REMOTE CONTROLLER, 32... TEN
KEY, 33...IR TRANSMISSION PART

498P0650 0600

DECLARATION FOR PATENT APPLICATION (JOINT OR SOLE)

(Under 37 CFR § 1.63; with Power of Attorney)

FROMMER LAWRENCE & HAUG LLP

FLH File No. 450108-4474

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention ENTITLED:

INFORMATION RECEIVING DEVICE AND ITS METHOD AND INFORMATION TRANSMISSION DEVICE AND ITS METHOD

the specification of which

___ is attached hereto.

X was filed on 19 June 1998 as International Application Serial No. PCT/JP98/02742,
with amendment(s) through _____ (if applicable, give dates).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Sec. 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s) (list additional applications on separate page): **Priority Claimed:**

Number:	Country:	Filed (Day/Month/Year):	Yes	No
9-162405	Japan	19 June 1997	X	
PCT/JP98/02742	PCT	19 June 1998	X	

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code § 112, I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Sec. 1.56, which became available between the filing date of the prior application and the national or PCT international filing date of this application:

Prior U.S. Application(s) (list additional applications on separate page):

Appln. Ser. Number: Filed (Day/Month/Year): **Status (patented, pending, abandoned):**

I hereby appoint WILLIAM S. FROMMER, Registration No. 25,506, and DENNIS M. SMID, Registration No. 34,930 or their duly appointed associate, my attorneys, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to file continuation and divisional applications thereof, to receive the Patent, and to transact all business in the Patent and Trademark Office and in the Courts in connection therewith, and specify that all communications about the application are to be directed to the following correspondence address:

WILLIAM S. FROMMER, Esq.
c/o FROMMER LAWRENCE & HAUG LLP
745 Fifth Avenue
NEW YORK, NEW YORK 10151

Direct all telephone calls to:
(212) 588-0800
to the attention of:
WILLIAM S. FROMMER

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

INVENTOR(S):

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Full name of sole or first inventor: Peter SHINTANI
Residence: Tokyo, Japan
Citizenship: Canada **SPX**

Date: Feb 26, 99

Signature: _____
Full name of 2nd joint inventor (if any): _____
Residence: _____
Citizenship: _____

Date: _____

Signature: _____
Full name of 3rd joint inventor (if any): _____
Residence: _____
Citizenship: _____

Date: _____

(Similarly list additional inventors on separate page)
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Note: In order to qualify for reduced fees available to Small Entities, each inventor and any other individual or entity having rights to the invention must also sign an appropriate separate "Verified Statement (Declaration) Claiming (or Supporting a Claim by Another for) Small Entity Status" form (e.g. for Independent Inventor, Small Business Concern, Nonprofit Organization, Individual Non-Inventor).

Note: A post office address must be provided for each inventor.